SEQUENCE LISTING

<110> Stanton, Jr., Vincent P.

<120> GENE SEQUENCE VARIANCE IN GENES RELATED
      TO FOLATE METABOLISM HAVING UTILITY IN DETERMINING THE
      TREATMENT OF DISEASE

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caccttttga agggcagaaa gtgaagggca ccgtccgccg tgtggtcctg cgaggggagg    5400
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agctgtccct tg                                                        6972
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<210> 3
<211> 3951
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 166, 3432, 3682, 3937
<223> n = t or c

<221> misc_feature
<222> 577, 638, 1708, 3730, 3925
<223> n = a or g

<400> 3
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agtatcctgg ctttaaatcc tcgaacacaa actcatgcaa ctctgngttc cacttcggcc    180
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```

<220>
<221> misc_feature
<222> 175, 1067
<223> n = g or a

<221> misc_feature
<222> 341
<223> n = c or g

<221> misc_feature
<222> 791, 1997, 2618, 2653
<223> n = t or c

<221> misc_feature
<222> 1337
<223> n = c or a

<221> misc_feature
<222> 2107
<223> nucleotide in position 2107 is g, or absent

<221> misc_feature
<222> 2583
<223> n = t or g

<400> 4
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agaagcaggt gcccgtggaa cctgggcctg accccgagct ccggtcctgg cggcncctcg   180
tgtgctacct ttgcttctac ggcttcatgg cgcagatacg gccaggggag agcttcatca   240
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tgctgctgct gggccactcg gtggcgcaca tgcagctcat ggagctcttc tacagcgtca   480
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<210> 5
<211> 3772
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 431, 441
<223> n = a or g

<221> misc_feature
<222> 498
<223> n = c or t

<221> misc_feature
<222> 579, 599
<223> n = g or c

<400> 5
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<210> 6
<211> 1536
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 1066
<223> n = t or c

<221> misc_feature
<222> 1136
<223> n = a or g

<221> misc_feature
<222> 1497
<223> n = t or a

<400> 6

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tcggagctgc cgcgccggcc cttgccccc gccgcacagg agcgggacgc cgagccgcgt       180
ccgccgcacg gggagctgca gtacctgggg cagatccaac acatcctccg ctgcggcgtc       240
aggaaggacg accgcacggg caccggcacc ctgtcggtat tcggcatgca ggcgcgctac       300
agcctgagag atgaattccc tctgctgaca accaaacgtg tgttctggaa gggtgttttg       360
gaggagttgc tgtggtttat caagggatcc acaaatgcta aagagctgtc ttccaaggga       420
gtgaaaatct gggatgccaa tggatcccga gacttttggg acagcctggg attctccacc       480
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tacagagata tggaatcaga ttattcagga cagggagttg accaactgca aagagtgatt       600
gacaccatca aaaccaaccc tgacgacaga agaatcatca tgtgcgcttg gaatccaaga       660
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aagctatttt tggaatattt ttagaatatt ttaagaattt cacaagctat tccctcaaat      1440
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tgttttatat gttgctataa taaagaagtg ttctgc                                1536
```

<210> 7
<211> 1187
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 276, 321, 534, 556
<223> n = c or t

<221> misc_feature
<222> 452, 640
<223> n = a or g

<221> misc_feature
<222> 492, 625
<223> n = c or a

<221> misc_feature
<222> 458
<223> nucleotide in position 458 is c, or absent

<400> 7

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cttttttttt tttttttttg ggacagtctt gctctgtcgc ccaggctgga gtacaatggt    180
cggatcttgg ctcactgcaa cctctgcctc ccaggttcaa gcaattcttc tgcctcagcc    240
tcccaagtag ccaccacgcc cagctaattt ttgtantttt agtagagacg ggggtttcac    300
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aagactctca gctgtggccc tgggctccgt tctgtgccac acccgtggct cctgcgtttc    720
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ttgcccccg ccgcacagga gcgggacgcc gagccgcgtc cgccgcacgg ggagctgcag    1020
tacctggggc agatccaaca catcctccgc tgcggcgtca ggaaggacga ccgcacgggc    1080
accggcaccc tgtcggtatt cggcatgcag gcgcgctaca gcctgagagg tgacgccgcg    1140
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```

<210> 8
<211> 18597
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 701, 13751
<223> n = c or a

<221> misc_feature
<222> 716, 1293, 2401, 2429, 2618, 3083, 3125, 3635, 4256, 4898,
       5062, 5167, 11069, 13298, 14479, 14730, 14796,15344, 15450,
       15503, 15590,15840, 16149
<223> n = a or g

<221> misc_feature
<222> 732, 1379, 1590, 2488, 3212, 6006, 11238, 11422, 11686,
       12598, 13171, 13645, 13782, 13806, 13813, 14586, 14788,
       15042, 15546, 15770
<223> n = c or t

<221> misc_feature
<222> 1322, 1688
<223> n = c or g

<221> misc_feature
<222> 2594, 11293, 16199, 16203
<223> n = g or t

<221> misc_feature
<222> 3619
<223> n = a or t

<221> misc_feature
<222> 14547
<223> nucleotide in position 14547 is t, or absent

<400> 8

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tggcggtctt tttttttttt tttttttttt tttttgggga cagtcttgct ctgtcgccca     240
ggctggagta caatggtcgg atcttggctc actgcaacct ctgcctccca ggttcaagca     300
attcttctgc ctcagcctcc caagtagcca ccacgcccag ctaatttttg tacttttagt     360
agagacgggg gtttcaccat gttgtccagg ctggtcttga actcctgacc tcaggtgatc     420
cacccgcctc ggccccccaa agtactagga ttacaggcgt gagccaccgc gtccagcgcc     480
ctggcggttt ttaatcaagt agaaaagctg cattatacca cttgcttcgg ttgcttcagt     540
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga tctcaaacag     600
cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct agagaaggc     660
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<210> 11
<211> 5847
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 124, 3346, 5024, 5484, 5650
<223> n = c or t

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<222> 439, 1333, 1979, 2151, 2469, 2977, 4784, 5268, 5631, 5733
<223> n = g or a

<221> misc_feature
<222> 1045
<223> nucleotide at position 1045 is c, or absent

<221> misc_feature
<222> 1046
<223> nucleotide at position 1046 is t, or absent

<221> misc_feature
<222> 2636, 5287

223> n = c or g

221> misc_feature
<222> 3118
223> n = g or t

<221> misc_feature
222> 3257, 4053
<223> n = a or c

<221> misc_feature
<222> 5440
<223> n = t or a

<400> 11
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<211> 2158
<212> DNA
<213> Homo sapiens

<220>
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<222> 802, 1900
<223> n = c or t

<221> misc_feature
<222> 1747
<223> n = t or g

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<210> 13
<211> 2630
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<222> 1424
<223> n = c or a

<221> misc_feature
<222> 1649, 2554
<223> n = a or g

<400> 13
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<210> 14
<211> 2912

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 263, 1037, 1139, 1955, 2017, 2037, 2139, 2309
<223> n = a or g

<221> misc_feature
<222> 266
<223> n = g or t

<221> misc_feature
<222> 527
<223> n = c or g

<221> misc_feature
<222> 1217, 1647, 2282
<223> n = c or t

<400> 14
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<210> 15
<211> 2196
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic construct

<221> misc_feature
<222> 1784
<223> n = a or g

<221> misc_feature
<222> 464
<223> n = g or t

<221> misc_feature
<222> 120, 519, 668, 1059, 1308
<223> n = c or t

<221> misc_feature
<222> 1289
<223> n = c or a

<400> 15

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ctggaccctg agcggcatga gagactccgg gagaagatga ggcggcgatt ggaatctggt     180
gacaagtggt tctccctgga attcttccct cctcgaactg ctgaggagc tgtcaatctc      240
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ccagcaggtg accctggctc agacaaggag acctcctcca tgatgatcgc cagcaccgcc     360
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cggggagacc caataggtga ccagtgggaa gaggaggang gaggcttcaa ctacgcagtg     540
gacctggtga agcacatccg aagtgagttt ggtgactact ttgacatctg tgtggcaggt     600
taccccaaag gccacccga agcagggagc tttgaggctg acctgaagca cttgaaggag      660
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ggcctccact tctacaccct caaccgcgag atggctacca cagaggtgct gaagcgcctg    1020
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```

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<210> 15
<211> 1137
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 575, 648
<223> n = t or c

<221> misc_feature
<222> 771
<223> n = g or c

<221> misc_feature
<222> 883
<223> n = g or a

<221> misc_feature
<222> 942
<223> nucleotide at position 942 is c, or absent

<221> misc_feature
<222> 1052
<223> n = a or c

<400> 16
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aagtgacctg ccaaagcttg tacacatgga aagtagtaga accaggatgc aaacacattt    180
ctttaccacc aacaccaata tctattttgc caacaaaaca atgaggggggc ctgagtaaat    240
aatctcaacg gttaactcca ccctccaatt gagatacttt tttttttttt ttttttttga    300
gacagggtct ggctctctgt cacccaggct ggaatgcagt ggtgccctca gcttcccaag    360
tagctaggac tacaggccac atgccaccat gcccagctaa ttttttgtatt ttttgtagaa    420
acagggtttt gccatattgc caaggctgtt ctcaaactcc tgggctcaag cagtcctcct    480
gcctcagcct cctaaagtaa gagaagttgg aaggaaaatg ggtgaaaata agaagttct      540
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